

REMARKS

Reconsideration of Applicants' specifically-claimed subject matter of Claims 1 to 20 respectfully is requested. For the reasons indicated hereafter Applicants' specifically-claimed contribution and the surprising documented advantages that accrue therefrom is absent in the teachings that are reasonably derived from the references.

For the reasons indicated in detail hereafter Claims 1 to 20 are urged to be in condition for allowance.

Applicants have surprisingly discovered through empirical research that molded articles formed from liquid crystal polymers display improved resistance to warpage when filled with plate-shaped fillers that meet the parameters specified in detail in Applicants' claims. See in this regard the Examples and Comparative Examples presented at Pages 11 to 14 of Applicants' Specification with particular reference to the data provided in Table 1 at Page 14. *The specified filler must be plate-shaped, have an average particle diameter of 0.5-100 μm , possess a $D/W \leq 5$, and the a dimensional relationship of $3 \leq W/H \leq 200$ must be satisfied.* These stringent claim limitations that are shown to impart dramatic and surprisingly improved warpage results in a molded article are totally absent in the teachings of the prior art. Applicants' claim parameters specify three critical dimensions for the filler that go beyond a specification of aspect ratio. Additionally, there is no hint or suggestion in the reasonably derived teachings of the references that Applicants' improved warpage results would ever be possible under any circumstances. It further is significant that the

improved warpage character is made possible without notably decreasing the mechanical properties.

The continued rejection of Claims 1 to 19 under 35 U.S.C. § 112, first paragraph, would be inappropriate. It is noted that Claim 20 was not subject to this rejection. See the discussion of the prior art at Pages 1 and 2 of the Specification where the shortcomings of prior art are discussed, particularly when the molded articles are thin in cross-section. See also, the Comparative Examples of Applicants' Specification in this regard. The claimed invention was made through empirical research. 35 U.S.C. § 103 expressly states:

"Patentability shall not be negated by the manner in which the invention was made".

Once armed with Applicants' teachings with respect the requisite filler dimensions in three directions, those of ordinary skill in the area of filler technology could classify and provide filler particles according to particle the dimensions specified by Applicants in a straightforward manner using know and readily available particle handling procedures. The withdrawal of the rejection is in order and respectfully is requested.

The continued rejection of Claims 1 to 19, under 35 U.S.C. § 112, second paragraph, as being indefinite, likewise would be inappropriate. It is noted that Claim 20 was not subject to this rejection. It is expressly stated that the plate-shaped filler must satisfy formulae (1) and (2) as well as have an average particle diameter of 0.5-109 μm . These formulae apply exclusively to the plate-shaped filler in view of the express wording arrangement of the claim. Also, the expressed dimensions of the plate-shaped filler are constant and are the same before and after being provided in the composition. There is

nothing in Applicants' teachings to suggest otherwise. It would be unreasonable to suggest that formulae (1) and (2) apply to the liquid crystal polymer since this is not stated either in the claims or in the Specification. In view of the above it respectfully is urged that the claim language is sufficiently definite and would be readily understandable by those skilled in the art. The withdrawal of the rejection is in order and respectfully is requested.

It is well established law that patentability is negated under 35 U.S.C. §102 only when the prior disclosure is identical to the invention sought to be patented. Each and every element of the claimed invention must be disclosed in a single reference in complete detail. See Akzo N.V. v. United States ITC, 808 F.2d 1471, 1 U.S.P.Q.2d 1241 (Fed. Cir. 1986); Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1 U.S.P.Q.2d 1081 (Fed. Cir. 1986); Rolls-Royce Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 231 U.S.P.Q. 185 (Fed. Cir. 1986); Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 230 U.S.P.Q. 81 (Fed. Cir. 1986); Great Northern Corp. v. Davir Core & Pad Co., 782 F.2d 159, 228 U.S.P.Q. 356 (Fed. Cir. 1986); In re Donohue, 766 F.2d 531, 226 U.S.P.Q. 619 (Fed. Cir. 1985); W.L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983); SSIH Equip. S.A. v. United States ITC, 713 F.2d 746, 218 U.S.P.Q. 678 (Fed. Cir. 1983); and Richardson v. Suzuki Morot Co., 868 F.2d 1226, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989).

The rejection of Claims 1 to 4, 6 to 9, 16 to 18 and 20 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 5,085,807 to Okamoto et al. is incapable of withstanding detailed analysis. Applicants readily acknowledge that various liquid crystal polymers are known in the art and a wide variety of fillers have been suggested for use therein when forming molded articles prior to the research of Applicants. There is absolutely no teaching in Okamoto et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

The continued rejection of Claims 1, 2, 4 to 6, 10, 12, 16 and 18 to 20 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 5,268,410 to Yamada et al. likewise is incapable of withstanding detailed analysis for the same reason. There is absolutely no teaching in Yamada et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

The continued rejection of Claims 1 to 4, 6 to 9, 16 to 18 and 20 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 5,399,608 to Allen et al. likewise is incapable of withstanding detailed analysis for the same reason. There is absolutely no teaching in Allen et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

The continued rejection of Claims 1 to 4, 6 to 9, 16 to 18 and 20 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 5,804,634 to Umetsu et al. likewise is incapable of withstanding detailed analysis for the same reason. There is absolutely no teaching in Umetsu et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. Aspect ratio only is specified and not a three-dimensional configuration of a plate-shaped particle as specified in formulae (1) and (2) of Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

The continued rejection of Claims 1 to 4, and 8 to 9 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 5,851,688 to Sandor et al. likewise is incapable of withstanding detailed analysis for the same reason. There is absolutely no teaching in Sandor et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

A rejection of Claims 1 to 4 and 8 to 9 under 35 U.S.C. § 102(b) as being anticipated by the teachings of U.S. Patent No. 6,063,848 to Murakami et al. likewise is incapable of withstanding detailed analysis for the same reason. It is not seen how 35 U.S.C. § 102(e) could possibly be applied. There is absolutely no teaching in Murakami et al. of providing a plate-shaped filler having dimensions as specified in detail in Applicants' claims. An aspect ratio of 1 to 2 for a powder filler specifies a generally

globular particle that expressly is outside the limitations of Applicants' claims. The withdrawal of the rejection is in order and respectfully is requested.

During a patentability analysis the mere allegation that the differences between the claimed subject matter and the prior art are obvious does not create a presumption of unpatentability. See In re Soli, 317 F.2d 941, 137 U.S.P.Q. 979 (CCPA 1963).

Obviousness must be predicated on something more than it would be obvious "to try". See Ex Parte Agrabright et al., 161 U.S.P.Q. 703 (POBA 1967), and In re Mercier, 515 F.2d 1161, 185 U.S.P.Q. 774 (CCPA 1975). It is well-established law that patentability determinations of this type are contrary to the statute. See In re Antonie, 559 F.2d 618, 195 U.S.P.Q. 6 (CCPA 1977); In re Goodwin et al., 576 F.2d 375, 198 U.S.P.Q. 1 (CCPA 1978); and In re Tomlinson et al., 363 F.2d 928, 150 U.S.P.Q. 623 (CCPA 1966).

See also, In re Rothermel et al., 47 C.C.P.A. 866, 125 U.S.P.Q. 328, 331:

It is easy now to attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been obvious to one having the ordinary skill of art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of the claims, it is not the type of rejection which the statute authorizes. 35 U.S.C. § 103 is very specific in requiring that a rejection on the grounds the invention 'would have been obvious' must be based on the subject matter as a whole at the time the invention was made."

Finally, the rejection of Claims 1 to 20 as being directed to obvious subject matter in view of the inadequate teachings of either U.S. Patent No. 5,085,807 to Okamoto et al. or U.S. Patent No. 5,268,410 to Yamada et al. or alternatively Yamada et al. in view of Okamoto et al. will not withstand a careful review. As indicated above, Applicants'

specifically-claimed contribution is lacking in the reasonably derived teachings of the references, and there is absolutely no suggestion how one could improve warpage resistance in a molded article as documented in Applicants' Specification or of the surprisingly advantageous results achieved by Applicants and reported in Table 1 at Page 14. Even if the teachings of the references were combined, Applicants' specifically-claimed contribution still would not be provided. The withdrawal of the 35 U.S.C. § 103 rejection is urged to be in order and respectfully is requested.

If there is any remaining point that requires clarification prior to the allowance of the application, the Examiner is urged to telephone the undersigned attorney so that the matter can be discussed and resolved at a personal interview.

Respectfully submitted,

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Date: November 13, 2003

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